

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1-12 in accordance with the following:

1. (CURRENTLY AMENDED) ~~A method of validation support~~ An apparatus that supports a validation of a target apparatus including a plurality of functional devices by generating an input/output sequence for the target apparatus, comprising:
  - a first input unit for inputting functional configuration information that represents a function of an apparatus to be validated;
  - a second input unit for inputting a condition for an the input/output sequence that is assigned to the apparatus;
  - a first generating unit that generates a validation item function that satisfies all conditions for the input/output sequence, based on the functional configuration information and the condition; and
  - an extracting unit that extracts a combination of configuration elements that constitute the functional configuration information functional devices as a validation item, based on from the validation item function; and
  - a second generating unit that generates the input/output sequence based on the validation item.
2. (CURRENTLY AMENDED) ~~The method apparatus~~ according to claim 1, wherein
  - ~~the validation item function is expressed by a binary decision diagram, and~~
  - ~~the validation item is extracted based on the validation item function that is expressed by the binary decision diagram.~~
3. (CURRENTLY AMENDED) ~~The method apparatus~~ according to claim 1, wherein the condition ~~for the input/output sequence includes a resource constraint condition for a functional device in the configuration elements that constitute the functional configuration information~~ the functional devices.

4. (CURRENTLY AMENDED) The ~~method~~apparatus according to claim 1, wherein the condition for the ~~input/output sequence~~ includes a condition that ~~makes a limitation on a configuration element to be validated among the configuration elements that constitute the functional configuration information~~ limits the functional devices to be included in the validation item.

5. (CURRENTLY AMENDED) The ~~method~~apparatus according to claim 1, wherein  
priority information is ~~added to a functional device in the configuration elements that constitutes the functional configuration information, and~~  
~~the method further comprises calculating a validation priority based on the priority information of the functional device for each validation item~~ the extracting unit extracts a plurality of validation items based on a priority of each of the validation items, the priority being calculated based on a priority assigned to each of the functional devices.

6. (CURRENTLY AMENDED) The ~~method~~apparatus according to claim 1, further comprising:  
~~inputting number of validation items to be extracted, wherein~~  
~~the validation item is extracted based on the number of validation items input~~ wherein the extracting unit extracts n or less validation items, where n is a positive integer larger than one.

7. (CURRENTLY AMENDED) The ~~method~~apparatus according to claim 1, further comprising:  
~~a converting unit that converts validation item description information that describes an operation of the functional device that constitutes the functional configuration information~~ a functional block diagram of the target apparatus into information that does not describe the operation of the functional device a graph including a plurality of nodes and a plurality of edges, wherein  
~~the information converted~~graph is input to the apparatus as the functional configuration information.

8. (CURRENTLY AMENDED) The ~~method~~apparatus according to claim 1, further comprising:

a third input unit for inputting a validation environment that defines a flow of data that is input to and output from the ~~target~~ apparatus-to-be-validated; and,

wherein the second generating unit that generates creating-an-the input/output sequence to-be-applied-to-the apparatus-to-be-validated, based on the validation environment and the validation item.

9. (CURRENTLY AMENDED) The ~~method~~apparatus according to claim ~~7~~1, wherein

~~the functional configuration information is input from a predetermined information terminal via a network;~~

~~the condition for the input/output sequence is input from the information terminal via the network; and~~

~~the validation item is output to the information terminal via the network~~ the apparatus is connected, via a network, to an information terminal from which the functional configuration information and the condition are input and to which the validation item and the input/output sequence are output.

10. (CURRENTLY AMENDED) The ~~method~~apparatus according to claim 8, wherein

~~the functional configuration information is input from a predetermined information terminal via a network;~~

~~the condition for the input/output sequence is input from the information terminal via the network;~~

~~the validation environment is input from the information terminal via the network;~~

~~the validation item is output to the information terminal via the network; and~~

~~the input/output sequence is output to the information terminal via the network~~ the apparatus is connected, via a network, to an information terminal from which the functional configuration information, the condition, and the validation environment are input and to which the validation item and the input/output sequence are output.

11. (CURRENTLY AMENDED) A computer-readable recording medium that stores therein a computer program for supporting a validation of a target apparatus including a plurality

of functional devices by generating an input/output sequence for the target apparatus that makes wherein the computer program causes a computer to execute:

inputting-receiving an input of functional configuration information that represents a function of an apparatus to be validated on the functional devices and connections among the functional devices;

inputting-receiving an input of a condition for an-the input/output sequence that is assigned to the apparatus;

generating a validation item function that satisfies all conditions for the input/output sequence, based on the functional configuration information and the condition; and

extracting a combination of configuration elements that constitute the functional configuration information-functional devices as a validation item, based on-from the validation item function; and

generating the input/output sequence based on the validation item.

12. (CURRENTLY AMENDED) ~~An apparatus for validation support~~ A method for supporting a validation of a target apparatus including a plurality of functional devices by generating an input/output sequence for the target apparatus, comprising:

an information input unit that inputs-inputting functional configuration information that represents a function of an apparatus to be validated on the functional devices and connections among the functional devices;

a condition input unit that inputs-inputting a condition for an-the input/output sequence that is given to the apparatus;

a generation unit that generates-generating a validation item function that satisfies all conditions for the input/output sequence, based on the functional configuration information and the condition; and

an extraction unit that extracts-extracting a combination of configuration elements that constitute the functional configuration information-functional devices as a validation item, based on-from the validation item function; and

generating the input/output sequence based on the validation item.